ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
REGULATORY CONTACT RECORD

Date/Time: March 23, 2001/ 10 15 AM

Site Contact(s): Tracey Spence
Phone: 4322

Regulatory Contact: Carl Spreng
Phone: 303-692-3358

Agency: CDPHE

Purpose of Contact: Building 771 IASAP Addendum

Discussion
Carl called and stated that the additional clarification sent on March 22, 2001 was acceptable for the B771 IASAP Addendum (see attached e-mail dated March 22, 2001) No additional edits to the B771 IASAP Addendum are needed Carl went on to say that CDPHE is comfortable with the concept of using surrogate analytes in future building characterization activities

We also discussed the planned sampling approach in 771 and the possibility of providing Carl with digital photographs of the sampling activities

E-mail correspondence between CDPHE and myself associated with the 771 IASAP Addendum is attached

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Contact Record Prepared By: Tracey Spence

Required Distribution
L Butler
A Primrose
N Castaneda
S Nesta
L Norland
ER Regulatory Contacts Book
Administrative Record

Spence, Tracey

From Spence, Tracey
Sent Thursday, March 22, 2001 3 29 PM
To 'Carl Spreng', kleeman gary@epamail epa gov, Spence, Tracey
Cc Butler, Lane, Primrose, Annette, Norland, Lee, Diane Niedzwiecki, STEVE Gunderson
Subject RE FW IASAP Addendum 1

Carl,

Thank you for your response Clarification for the three points previously discussed is given below with regard to the B771 decommissioning strategy IASAP Addendum

PCOCs for the UBC include chemicals identified based on process knowledge that have the potential to cause contamination of environmental media As stated below, a characterization analyte list was compiled from the PCOC list by identifying those chemicals for which indicator analytes will be used The objective of the preliminary characterization for B771 is to identify potential contamination beneath the structural support of the building and to determine whether the building shell can be retained Because the detection of indicator chemicals will provide adequate data to meet the B771 preliminary characterization objective, additional analyses will not be required for those PCOCs eliminated from the characterization analyte list

Selection of PCOCs at other buildings will be made based on process knowledge for each facility in accordance with the IASAP

At this time, the B771 preliminary characterization activities are scheduled to begin next week I will notify you of the start date and provide updates through project completion

Thanks,

Tracey

----Original Message----
From Carl Spreng [SMTP cspreng@smtpgate dphe state co us]
Sent Friday, March 16, 2001 3 36 PM
To kleeman gary@epamail epa gov, Tracey Spence@rfets gov
Cc Annette Primrose@rfets gov, Lee Norland@rfets gov Diane Niedzwiecki STEVE Gunderson
Subject Re FW IASAP Addendum 1

Tracey

Thanks for providing justification for reducing the characterization analyte list for B771 The explanation seems sufficient to allow us to concur with the IASAP Addendum for B771

Several points seem to be implied and need to be confirmed or need clarification in your response

1 PCOCs for UBC at a building is a complete list of chemicals that may potentially be of concern based on process knowledge for the building
2 A characterization analyte list may be compiled from the PCOC list by identifying those chemicals for which surrogate analytes may be used Justification for using those surrogates will be added to the IASAP Addendum
3 If "indicator chemicals" are detected, additional analyses will be conducted for those PCOCs eliminated from the characterization analyte list Final decisions will be based on total risk, including the risk from those chemicals whose presence is indicated by surrogate analytes

The rationale of using surrogate analytes could apply to UBC at other

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buildings, this process should, therefore, be incorporated into the IASAP

Please keep us informed as to the characterization sampling schedule

Carl

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Spence, Tracey

From Spence, Tracey
Sent Thursday, March 15, 2001 5 13 PM
To 'Carl Spreng@cdphe co us'
Cc Norland, Lee, Primrose, Annette
Subject FW IASAP Addendum 1

Carl,

The Building 771 preliminary characterization sampling project is in the final planning phase and is currently scheduled to begin the week of March 26 Based on the reasoning described below we have revised the IASAP Addendum to remove the following analytes from the target analyte list cyclohexane, the two metals tantalum and cerium, neptunium and the fission products cesium-137, cobalt-60, and strontium-90 We prefer to have your concurrence on the IASAP Addendum prior to starting work Please contact me or Lee Norland if you have any questions

> -----Original Message-----
> From Spence, Tracey
> Sent Tuesday, February 27, 2001 11 04 AM
> To 'Carl Spreng', Spence, Tracey
> Cc kleeman gary@epamail epa gov, Primrose, Annette, Norland, Lee,
> Reeder, Daniel, Diane Niedzwiecki, KENNETH Niswonger
> Subject RE IASAP Addendum 1
>
> Carl,
>
> As you requested, the justification to reduce the 771 preliminary
> characterization analyte list presented in the IASAP Addendum 1 is
> provided below
>
> Cyclohexane and the two metals tantalum and cerium, if present, are
> associated with other contaminants from potential leaks from the original
> process waste lines The presence of cyclohexane might be indicated if
> other organic compounds are detected using routine analytical methods for
> semi-volatile (Method 8270C) organic compounds Likewise, tantalum and
> cerium might be indicated if metals are detected using the laboratory
> analysis Method 6010A, as prescribed in Addendum 1
>
> Separate analyses for cyclohexane are estimated to increase the standard
> volatile organic analysis cost by $200 per sample The separate
> analytical costs for tantalum and cerium total approximately $300 per
> sample Given the proposed 38 to 40 samples for this preliminary
> characterization sampling, the additional cost for these non-routine
> analyses would be $19,000 to $20,000 Currently, there are no
> cost-effective alternative analytical methods available for measuring
> these compounds
>
> In addition, neptunium and the fission products cesium-137, cobalt-60, and
> strontium-90 are reportedly associated with the 771 original process waste
> lines These fission and daughter products are known to be associated
> with plutonium and americium processing and have similar fate and
> transport characteristics, and should not be present without plutonium and
> americium contamination Since the Addendum 1 analytical methods include
> isotopic analysis for plutonium, americium and uranium isotopes, these
> will be removed from the 771 preliminary characterization target analyte
> list As indicated in the 771 Closure Project Decommissioning Operations
> Plan, removal of the potential contaminants of concern listed for 771
> would effectively remediate other associated analytes, such as fission and

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> transuranic products
>
> In regard to PCBs, it is true that PCBs are associated with dielectric
> uses, however site documents associate potential releases of PCBs in 771
> with hydraulic oils Note that Total Petroleum Hydrocarbons analysis will
> be added to the target analyte list to assess the presence of fuel and/or
> hydraulic oils
>
> -----Original Message-----
> From Carl Spreng [SMTP cspreng@smtpgate dphe state co us]
> Sent Tuesday, February 20, 2001 12 49 PM
>
> To Tracey Spence@rfets gov
> Cc kleeman gary@epamail epa gov, Annette Primrose@rfets gov,
> Lee Norland@rfets gov, Diane Niedzwiecki, KENNETH Niswonger
> Subject Re IASAP Addendum 1
>
> Tracey
>
> The Draft Addendum to the IASAP for the Building 771 UBC looks
> well-written and complete The tables and figures particularly useful
> The only comments I have regard the proposed changes to Table 1 -
> Potential Contaminants of Concern
>
> This table should be based on process knowledge as to what chemicals
> may potentially be of concern under Building 771, as apparently complied
> in the current table The list of actual analytes, however, could be a
> subset of this list if adequate justification is provided To reduce
> the list State might agree to the use of surrogates or "indicator
> contaminants" if a couple of criteria are met
> 1 If it is shown that the chemical in question cannot be
> effectively or efficiently detected by routine analytical methods This
> would include explaining that alternative analyses (e g ,
> radio-immunoassay, ICPMS, etc) are also not available or
> cost-effective Alternative analytical methods do not necessarily have
> to be EPA-approved
> 2 If reasonable justification for specific surrogate analytes is
> provided This justification would likely include demonstrating that
> the surrogate has sufficiently similar physical properties (e g ,
> mobility in the environment)
>
> In Table 1, "hydraulic oil" is listed as the PCOC for the PCB
> Contaminant Group Wouldn't PCBs more likely be associated with
> dielectric uses, such as transformers or capacitors?
>
> Carl
>
> _____
> >>> "Spence, Tracey" <Tracey Spence@rfets gov> 02/09/01 05 50PM >>>
> Carl,
>
> Based upon further review of the target analyte list presented in the
> Draft
> Addendum 1 to the IASAP - Building 771 UBC, we are considering
> removing
> three analytes from the list cyclohexane, tantalum, and cerium
> These
> analytes are listed as process constituents associated with the
> Process
> Waste Lines beneath Building 771 (Historical Release Report [DOE
> 1994])
>
> In addition to cyclohexane, tantalum, and cerium, the target analyte
> list

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> for the preliminary characterization sampling includes the primary
> actinides, metals, and VOCs, which are also associated with the 771
> Process
> Waste Lines As described in the Draft Addendum 1 to the IASAP -
> Building
> 771 UBC, the objective of the preliminary characterization sampling
> for
> Building 771 is to identify potential contamination beneath the
> structural
> support of the building to support the Building 771/774 Closure
> Project
> demolition strategy Follow-on sampling will be conducted to further
> characterize and delineate the extent of Building 771/774 UBC at the
> time of
> building remediation in accordance with the IASAP If a release from
> the
> Process Waste Lines occurred, then detections of these compounds would
> act
> as indicators for the likely presence of tantalum, cerium, and
> cyclohexane
> and would provide adequate data to meet the objective of the
> preliminary
> sampling for Building 771
>
> Considering the total number of samples proposed for the preliminary
> characterization, removing cyclohexane, tantalum, and cerium from the
> target
> analyte list will reduce the project laboratory and sample shipment
> costs by
> $19,000 to $20,000
>
> Please contact me or Lee Norland (303-966-5223) if you have any
> questions
>
> Tracey Spence
> Environmental Restoration, B116
> 303-966-4322
> Pager 212-6575
> Fax 303-966-5180

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Spence, Tracey

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Sent Tuesday, February 27, 2001 11 04 AM
To 'Carl Spreng', Spence, Tracey
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Separate analyses for cyclohexane are estimated to increase the standard volatile organic analysis cost by $200 per sample The separate analytical costs for tantalum and cerium total approximately $300 per sample Given the proposed 38 to 40 samples for this preliminary characterization sampling, the additional cost for these non-routine analyses would be $19,000 to $20,000 Currently, there are no cost-effective alternative analytical methods available for measuring these compounds

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Waste Lines As described in the Draft Addendum 1 to the IASAP - Building
771 UBC, the objective of the preliminary characterization sampling for
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support of the building to support the Building 771/774 Closure Project
demolition strategy Follow-on sampling will be conducted to further
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Process Waste Lines occurred, then detections of these compounds would act
as indicators for the likely presence of tantalum, cerium, and cyclohexane
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characterization, removing cyclohexane, tantalum, and cerium from the target
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Tracey Spence
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